Amendments to the Claims

This listing of claims will replace all prior versions, and listing, of claims in the application:

1.   (Previously Presented)   A method of updating a non-essential region stored in a non-volatile memory device in a computer system, the method comprising:

building an image file, the image file comprising an essential region for storing program code required for booting the computer system and a non-essential region for storing optional program code for the computer system;

copying the image file to the non-volatile memory device in the computer system;

and

following copying the image file to the non-volatile memory device in the computer system, updating only the non-essential region stored in the non-volatile memory device to update the optional program code for the computer system and not updating the essential region stored in the non-volatile memory device.

2.   (Previously Presented)   The method of claim 1, wherein the non-essential region in the image file comprises one or more non-essential blocks.

3.   (Previously Presented)   The method of claim 2, further comprising reserving at least one of a plurality of sectors in the non-volatile memory device for storing exclusively the one or more non-essential blocks.

4.   (Previously Presented)   The method of claim 3, wherein updating the non-essential region in the non-volatile memory device comprises mapping the one or more non-essential blocks to the at least one reserved sector in the non-volatile memory device.

5.   (Previously Presented)   The method of claim 3, wherein updating the non-essential region in the non-volatile memory device comprises mapping the one or more non-essential blocks to a portion of the at least one reserved sector in the non-volatile memory device.

6.   (Previously Presented)   The method of claim 5, wherein the portion of the at least one reserved sector in the non-volatile memory device is a paragraph multiple.

7.   (Original)   The method of claim 1, wherein the program code in the essential region comprises a power-on self test (POST) routine.

8.   (Previously Presented)   The method of claim 2, wherein one of the one or more non-essential blocks comprises a header and at least one module.

9.   (Previously Presented)   The method of claim 8, wherein the header is located at the beginning of the one of the one or more non-essential blocks.

10.   (Previously Presented)   The method of claim 8, wherein the header comprises a pointer to a first module in the one of the one or more non-essential block.

11.   (Original)   The method of claim 8, wherein the at least one module comprises a module header and module data.

12.   (Original)   The method of claim 11, wherein the module header comprises a pointer to a next module in the at least one non-essential block.

13.   (Original)   The method of claim 11, wherein the module data comprises at least one of:

graphics data;

a language module; and

diagnostic tools.

14.   (Previously Presented)   A computer system for updating non-essential data in a non-volatile memory device, comprising:

the non-volatile memory device for storing an image file, the image file comprising an essential region for storing program code required for booting the computer system and a non-essential region for storing optional program code for the computer system;

a memory for storing a program containing code for updating the image file stored in a the non-volatile memory device; and

a processor, functionally coupled to the memory and associated with the non-volatile memory device, wherein the processor is responsive to computer-executable instructions contained in the program and operative to:

copy the image file to the non-volatile memory device; and

update only the non-essential region in the non-volatile memory device to

update the non-essential data and not update the essential region in

the non-volatile memory device.

15.   (Original)   The computer system of claim 14, wherein the non-essential region in the image file comprises at least one non-essential block.

16.   (Previously Presented)   The computer system of claim 15, wherein the non-volatile memory device comprises a plurality of sectors for storing the at least one non-essential block.

17.   (Original)   The computer system of claim 15, wherein the at least one non-essential block comprises a header and at least one module.

18.   (Original)   The computer system of claim 17, wherein the header is located at the beginning of the non-essential block.

19.   (Original)   The computer system of claim 17, wherein the at least one module comprises a module header and module data.

20.   (Original)   The computer system of claim 19, wherein the module data comprises program code.

21.   (Original)   The computer system of claim 19, wherein the module data comprises at least one of:

graphics data;

a language module; and

diagnostic tools.

22.   (Original)   The computer system of claim 14, wherein the essential region in the image file comprises critical program code.

23.   (Original)   The computer system of claim 22, wherein the critical program code comprises a power-on self test (POST) routine.

24.   (Currently Amended) A computer-readable storage medium having computer-executable instructions stored thereon that, when executed by a computer, cause the computer tofor performing steps comprising:

build building an image file for updating a BIOS installed within a computer system, wherein the BIOS includes , the image file comprising an essential region for storing program code required for booting the computer system and a non-essential region for storing optional program code for not required for booting the computer system, wherein the image file includes an updated non-essential region;

copy copying the essential region and the updated non-essential region to a non-volatile memory device provided by the computer system; and

following after copying the essential region and the updated non-essential region to the non-volatile memory device, updateing only the non-essential region in the BIOS with the updated non-essential region in the non-volatile memory device and not updatingwhile maintaining the essential region unchanged in the non-volatile memory device.

25.   (Currently Amended) The computer-readable <u>storage</u> medium of claim 24, wherein the non-essential region in the image file comprises at least one non-essential block.

26.   (Currently Amended) The computer-readable <u>storage</u> medium of claim 25, further comprising <u>computer-executable instructions for causing the computer to reserve</u> ~~reserving~~ at least one of a plurality of sectors in the non-volatile memory device for storing the at least non-essential block.

27.   (Currently Amended) The computer-readable <u>storage</u> medium of claim 26, wherein updating only the non-essential region in the non-volatile memory device comprises mapping the at least one non-essential block to the at least one reserved sector in the non-volatile memory device.

28.   (Currently Amended) The computer-readable <u>storage</u> medium of claim 26, wherein updating only the non-essential region in the non-volatile memory device comprises mapping each non-essential block to a portion of the at least one reserved sector in the non-volatile memory device.

29.   (Currently Amended) The computer-readable <u>storage</u> medium of claim 28, wherein the portion of the at least one reserved sector in the non-volatile memory device is a paragraph multiple.

30.   (Currently Amended) The computer-readable <u>storage</u> medium of claim 24, wherein the program code in the essential region comprises a power-on self test (POST) routine.

31.   (Currently Amended) The computer-readable <u>storage</u> medium of claim 25, wherein the at least one non-essential block comprises a header and at least one module.

32.   (Currently Amended) The computer-readable <u>storage</u> medium of claim 31, wherein the header is located at the beginning of the at least one non-essential block.

33.   (Currently Amended) The computer-readable storage medium of claim 31, wherein the header comprises a pointer to a first module in the at least one non-essential block.

34.   (Currently Amended) The computer-readable storage medium of claim 31, wherein the at least one module comprises a module header and module data.

35.   (Currently Amended) The computer-readable storage medium of claim 34, wherein the module header comprises a pointer to a next module in the at least one non-essential block.

36.   (Currently Amended) The computer-readable storage medium of claim 34, wherein the module data comprises program code.

37.   (Currently Amended) The computer-readable storage medium of claim 34, wherein the module data comprises at least one of:

        graphics data;

        a language module; and

        diagnostic tools.

38.   (Previously Presented)   A method of utilizing a non-essential region in a non-volatile memory device for executing updated program code, the method comprising:

searching the non-essential region in the non-volatile memory device for at least one module, wherein the non-volatile memory device comprises a plurality of modules containing program code for a computer system;

if the at least one module is found in the non-essential region, then executing the program code in the at least one module, wherein the at least one module in the non-essential region contains an updated version of the program code for the computer system;

if the at least one module is not found in the non-essential region, then searching an essential region in the non-volatile memory device for the at least one module, wherein the at least one module in the essential region contains a current version of the program code for the computer system; and

if the at least one module is found in the essential region, then executing the program code in the at least one module.

39.   (Cancelled).

40.   (Original)   The method of claim 38, wherein the at least one module further comprises a module header, the module header comprising an identification of the program code contained in the at least one module.

41.   (Original)   The method of claim 38, wherein the updated version of the program code contained in the non-essential region comprises updated program code for a BIOS in the computer system.

42.   (New)   A computer-readable storage medium having computer-executable instructions stored thereon that, when executed by a computer system, cause the computer system to:

search a non-essential region in a non-volatile memory device included within the computer system for at least one module, wherein the non-volatile memory device comprises a plurality of modules containing program code for the computer system;

if the at least one module is found in the non-essential region, then execute the program code in the at least one module, wherein the at least one module in the non-essential region contains an updated version of the program code for the computer system;

if the at least one module is not found in the non-essential region, then search an essential region in the non-volatile memory device for the at least one module, wherein the at least one module in the essential region contains a current version of the program code for the computer system; and

if the at least one module is found in the essential region, then execute the program code in the at least one module.

43.   (New) The computer-readable storage medium of claim 42, wherein the at least one module further comprises a module header, the module header comprising an identification of the program code contained in the at least one module.

44.   (New) The computer-readable storage medium of claim 42, wherein the updated version of the program code contained in the non-essential region comprises updated program code for a BIOS in the computer system.

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